

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Delta Design

#### California Manufacturing Technology Consulting

### Cohu, Inc. Improves Profitability with Implementation of Lean Manufacturing and Six Sigma

#### Client Profile:

Cohu, Inc., headquartered in Poway, California encompasses three different companies or subsidiaries. Cohu, Inc. U.S. operations include Delta Design, Inc. a leading supplier of test handling, burn-in and thermal solutions used by the global semiconductor industry; Broadcast Microwave Systems, Inc. produces microwave video equipment and antennae systems; while Cohu Electronics manufactures closed-circuit television surveillance equipment.

#### Situation:

The subsidiaries within Cohu were experiencing many challenges with the various products they produced and the industry segments they serve. Delta Design had implemented Lean Manufacturing principles in their manufacturing operations and now wanted to expand their implementation by making additional improvements in quality, increase first pass yield and increase service to their customers. Broadcast Microwave Systems was experiencing significant growth in their business and needed to reduce lead time, increase product quality and increase profitability for their operations in order to remain competitive. During a needs assessment conducted with the senior management of Delta Design, Inc. and Broadcast Microwave Services, Inc., California Manufacturing Technology Consulting (CMTC), a NIST MEP network affiliate, determined that quality, productivity and profitability could be improved by implementing Lean Manufacturing and Six Sigma Green Belt practices in both organizations.

#### Solution:

CMTC consultants provided training in the basics of Lean Manufacturing principles and tools including 6S (Sort, Set in Order, Shine, Standardize, Sustain, Safety), Visual Manufacturing, Cellular Flow and Pull/Kanban Systems. The training CMTC consultants provided was interactive with participants working on group projects on their own factory floors implementing the concepts as they were learning them. This allowed the employees to have a personal connection to the training material and practical application. The Six Sigma Green Belt Training included the training and the application of the Six Sigma tools to internal projects. Cohu employees gathered data, conducted analysis and each group reported on their results throughout the different phases of the class. This enabled the employees to put the Six Sigma tools into practical use by experiencing how the tools work in solving problems. The training facilitated by CMTC provided a common problem solving methodology and language for addressing ongoing improvement projects for the company. An enhanced work environment was created because employees were involved in the decision-making process in the areas they worked in. Employees were held accountable for sustaining the changes made and were motivated to develop and implement new continuous improvement initiatives. Savings were accrued from reduced production time and improved product quality yield. These benefits were in addition to the continuous improvement skills gained by the team members who worked on the various projects. Cohu, Inc.

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received the 2009 San Diego Chapter, American Society of Training & Development (ASTD) P.E.A.K Award in the manufacturing business sector based on the success of the project to their business. This award honors outstanding learning and performance achievements. Award emphasis was placed on recognizing those learning and performance initiatives which exemplify Performance Excellence and Applied Knowledge.

#### **Results:**

Delta Design Impacts:

- \* Realized \$200,000 in cost savings.
- \* Retained 50 percent of sales.
- \* Increased first pass yields by 50 percent.
- \* Created 3 jobs.

Broadcast Microwave Systems Impacts:

- \* Increased sales by 27 percent.
- \* Realized \$15,000 in cost savings.
- \* Reduced assembly time by 10 percent.
- \* Increased throughput by 25 percent.
- \* Created 3 jobs.

#### **Testimonial:**

"The enthusiasm imparted during the training carried into the pilot effort on the factory floor. The resulting empowerment created a spring board for rapid improvement. CMTC staff, practices and expertise are World Class."

Tom Lightner, Vice President Operations